

Amendments to the Claims: The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method, comprising:

configuring a mechanism for accumulating information based on an access control list including a plurality of access control list entries, with one or more of the plurality of access control list entries identifying network accounting data collection requests; said configuring the mechanism including: associating network accounting data collection mechanisms with each of said one or more of the plurality of access control list entries identifying network accounting data collection requests; and wherein the access control list identifies to a bridge or a router information for allowing and denying flows of packet traffic, with at least one of the plurality of access control list entries identifies a deny operation and at least one of the plurality of access control list entries identifies a permit operation; and

employing the bridge or the router to perform the following operations: for each particular item of a plurality of items: identifying a particular network accounting data collection mechanism of said network accounting data collection mechanisms corresponding to the particular item based on matching the particular item with said one or more of the plurality of access control list entries; and in response, updating the particular network accounting data collection mechanism corresponding to the particular item;

wherein each item of the plurality of items includes one or more fields of a corresponding received packet; and wherein said operation of identifying the particular network accounting data collection mechanism of said network accounting data collection mechanisms corresponding to the particular item includes: performing a lookup operation in an associative memory based on the lookup value including the particular item to identify an associative memory result; and performing a lookup operation on an adjunct memory based on the associative memory result to identify the particular network accounting data collection mechanism of said network accounting data collection mechanisms.

Claim 2 (canceled)

Claim 3 (currently amended): The method of ~~claim 2~~ claim 1, wherein each item of the plurality of items further includes at least one autonomous system number, said at least one autonomous system number identifying a set of communication devices under a single administrative authority.

Claim 4 (currently amended): The method of claim 1, wherein at least one of said network accounting data collection mechanisms is associated with at least two different access control list entries in said one or more of the plurality of access control list entries identifying network accounting data collection requests.

Claims 5-20 (canceled)

Claim 21 (currently amended): An apparatus, comprising:

one or more processors and memory, wherein the memory stores one or more instructions that, when executed by said one or more processors, perform operations comprising: configuring a mechanism for accumulating information based on an access control list including a plurality of access control list entries, with one or more of the plurality of access control list entries identifying network accounting data collection requests; said configuring the mechanism including: associating network accounting data collection mechanisms with each of said one or more of the plurality of access control list entries identifying network accounting data collection requests; and wherein the access control list identifies to a bridge or router information for allowing and denying flows of packet traffic, with at least one of the plurality of access control list entries identifies a deny operation and at least one of the plurality of access control list entries identifies a permit operation; and

means for: means for, for each particular item of a plurality of items: identifying and updating a particular network accounting data collection mechanism of said network accounting data collection mechanisms corresponding to the particular item based on matching the particular item with said one or more of the plurality of access control list entries; and in response, updating the particular network accounting data collection mechanism corresponding to the particular item;

wherein the apparatus is the bridge or the router; and wherein each item of the plurality of items includes one or more fields of a corresponding received packet; and wherein said means for identifying the particular network accounting data collection mechanism of said network accounting data collection mechanisms corresponding to the particular item includes: means for performing a lookup operation in an associative memory based on the lookup value including the particular item to identify an associative memory result; and means for performing a lookup operation on an adjunct memory based on the associative memory result to identify the particular network accounting data collection mechanism of said network accounting data collection mechanisms.

Claim 22 (canceled)

Claim 23 (currently amended): The ~~method of claim 22~~ apparatus of claim 21, wherein each item of the plurality of items further includes at least one autonomous system number, said at least one autonomous system number identifying a set of communication devices under a single administrative authority.

Claim 24 (previously presented): The ~~method~~ apparatus of claim 21, wherein at least one of said network accounting data collection mechanisms is associated with at least two different access control list entries in said one or more of the plurality of access control list entries identifying network accounting data collection requests.

Claim 25 (currently amended): An apparatus, comprising:

means for configuring a mechanism for accumulating information based on an access control list including a plurality of access control list entries, with one or more of the plurality of access control list entries identifying network accounting data collection requests; said means for configuring the mechanism including: means for associating network accounting data collection mechanisms with each of said one or more of the plurality of access control list entries identifying network accounting data collection requests; and wherein the access control list identifies to a bridge or router information for allowing and denying flows of packet traffic, with at least one of the plurality of access control list entries identifies a deny operation and at least one of the plurality of access control list entries identifies a permit operation; and means for: means for, for each particular item of a plurality of items: identifying and updating a particular network accounting data collection mechanism of said network accounting data collection mechanisms corresponding to the particular item based on matching the particular item with said one or more of the plurality of access control list entries; and in response, updating the particular network accounting data collection mechanism corresponding to the particular item;

wherein the apparatus is the bridge or the router; and wherein each item of the plurality of items includes one or more fields of a corresponding received packet; and wherein said means for identifying the particular network accounting data collection mechanism of said network accounting data collection mechanisms corresponding to the particular item includes: means for performing a lookup operation in an associative memory based on the lookup value including the particular item to identify an associative memory result; and means for performing a lookup operation on an adjunct memory based on the associative memory result to identify the particular network accounting data collection mechanism of said network accounting data collection mechanisms.

Claims 26-28 (canceled)

Claim 29 (new): The apparatus of claim 25, wherein each item of the plurality of items further includes at least one autonomous system number, said at least one autonomous system number identifying a set of communication devices under a single administrative authority.

Claim 30 (previously presented): The apparatus of claim 25, wherein at least one of said network accounting data collection mechanisms is associated with at least two different access control list entries in said one or more of the plurality of access control list entries identifying network accounting data collection requests.